Analysis of features of granitic geomorphologic landscape in Mt. Chaya

JIANHUA FANG¹, FUJIN SONG², FENGMING SHANG², AND ZHENG ZHANG¹ - 1. Henan Institute of Geological Survey, Zhengzhou 450001, Henan, China <fangjh1959@163.com> ¶ 2. Mt. Chaya National Geopark, Zhumadian 463100, Henan, China

This paper discusses the types and features of granitic geomorphologic landscape in Mt. Chaya National Geopark, and compares the features of granitic geomorphologic landscape in Mt. Chaya, with those of granitic geomorphologic landscapes in China and in the world. Features of granitic geomorphologic landscape in Mt. Chaya include: (1) granitic geomorphologic landscapes are mainly geomorphologic landscapes of granite pictographic stones, which have more than one hundred granite pictographic stones in all forms. Affected by mineral composition, degree of crystallization, spherical weathering of medium-coarse grained syenogranite, the surface of majority of pictographic stones of granite are smooth and edgeless. Therefore, they look more vivid and realistic instead of abstract; (2) The granitic mass in Mt.Chaya appeared in stocks and are distributed in a small area, which make the whole granitic geomorphologic landscape as delicate and elegant as a "natural potted landscape"; (3) The terrain is unique because Mt. Chaya rises straight from the ground and borders the plain, making it very magnificent; and (4) Mt. Chaya has many geomorphologic landscapes of granite caves, cave in cave, cave link cave; the length of a cave can be as long as dozens of metres or even a hundred metres.

The granitic geomorphologic landscape in Mt. Chaya has a very high aesthetic value and it is embodied in the following aspects namely beauty, uniqueness, majesty, peril and illusion. The features of granitic geomorphologic landscape in Mt. Chaya is thought to be formed by medium-coarse syenogranite, the relatively coarse mineral crystallizations and the uniform lithology, joint fissures developing in moderate density, unique geomorphologic position and the special climate condition in the transitional zone from north subtropical zone to warm temperate zone, which is a powerful witness to the significant zonality of granitic geomorphology. This paper provides references for finding similar granitic geomorphologic landscapes with the aesthetic value.

Presented in Theme 1